

## ABSTRACT

A network fingerprinting component for a computerized system issues network identifiers (NID) for computer networks. Identity confidences may be determined for each issued network identifier with respect to current computer networks. Computer network attributes may include passive network attributes and active network attributes. Retrieving values for active network attributes involves generating network traffic. As a result passive network attributes may be available to the network fingerprinting component before active network attributes. Learned identity confidence modifiers may be applied to identity confidences determined independent of active network attributes to achieve more accurate identity confidence sooner. Better learned identity confidence modifiers may be obtained by comparing identity confidences for a particular computer network determined independently of active network attributes with identity confidences for the computer network determined once active network attributes become available and then adjusting the learned identity confidence modifiers so as to minimize any differences.